

Review on “A composite approach to produce reference datasets for extratropical cyclone tracks: Application to Mediterranean cyclones” by Flaounas et al.

Overall, the authors have carefully considered my previous comments and have revised the manuscript in a suitable way. I thank the authors for doing so. I only have a few comments remaining, most very minor. The two exceptions are:

1. In my opinion, my previous comment #1b concerning which tracking algorithms have been designed specifically for Mediterranean cyclones, has not been fully dealt with. This information should be included clearly in the main text, not in an Appendix where it is not particularly clear which methods were designed specifically for Mediterranean cyclones. It could possibly be added to Table 1 as well as mentioned in the text.
2. I still do not think the authors answer my previous comment #1a of whether this method is **necessary** in all regions. The manuscript now discusses whether this method would work and how appropriate it would be and while I appreciate the addition it is not the same thing. However, I also appreciate to answer this thoroughly would require extensive work which is beyond the scope of this manuscript. However, a comment about whether this method is needed / is necessary everywhere could be added to the discussion e.g. near line 710.

Very minor comments:

1. Line 101. Could also add coastlines here as well as steep topographic barriers.
2. Line 140. Many types of cyclones elsewhere in the world also cross continental areas so I do not think this is unique to Mediterranean cyclones.
3. Line 153 – 156. Does hourly resolution really make tracking easier? Aren't many tracking algorithms designed to work with 6 hourly data and hence include thresholds based on this?
4. Line 313: “..to gain insights into the maximum of agreement...” There is something missing / not quite right here.
5. Line 334. “...that the complexity of cyclone systems is evolving in time...”, I don't agree with this statement (or maybe I misunderstand). I would think it is more likely that decreasing percentages as a function of overlap time is caused by the different methods identifying the start of the cyclones at different times.
6. Line 373 – 378. Is this text really needed? It seems a bit odd here.
7. Line 450. M04 also uses relative vorticity as an input field. This sentence should be more specific to state that M07 is the only method which only uses relative vorticity.
8. Line 463. This is quite repetitive – this has just been stated on line 451.
9. Line 581: “*M01 and M03 contribute to more than half of composite tracks even in datasets with low confidence level*”. Do you know what is the reason for this? I find it quite interesting.
10. Line 634. I assume time is in UTC? This could be added here.
11. Line 648. Should cyclone be cyclonic here?
12. Line 692: “in a maritime area over the open oceans”. This could be more concise.
13. Line 696. Change “far from” to “away from”
14. Line 785, M06. Need to start a new paragraph here. Something has gone wrong with the formatting here.
15. Line 801. The -5 and -1 here need to be superscripts.
16. Line 828. Title of Appendix B is hard to see, put in bold?